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**(BSP January 27, 2003)**

**Placing Polyester Concrete Overlay**

Application of the HMWM prime coat and the polyester concrete overlay shall not begin if rain is expected. The area receiving the prime coat shall be dry and had no rain for at least 24 hours. Immediately prior to applying the prime coat, the surface receiving the prime coat shall be swept clean by compressed air to remove accumulated dust and any other loose material.

The concrete bridge deck surface temperature shall be between 10C and 38C when the prime coat is applied.

The prepared concrete surface shall receive one coat of promoted/initiated wax-free HMWM resin. The promoted/initiated HMWM resin primer shall be worked into the concrete in a manner to effect complete coverage of the area. A 35 ml sample of each batch of promoted/initiated HMWM resin shall be retained and submitted to the Engineer at the time of primer application to verify proper catalyzation. Under no circumstances shall any resin be allowed to run into drains and expansion joints, or otherwise escape the Contractor's collection and containment system.

If the HMWM primed surface becomes contaminated, the contaminated area shall be cleaned by abrasive blasting and reprimed at no additional expense to the Contracting Agency.

The HMWM prime coat shall cure for a minimum of 30 minutes before placing the polyester concrete overlay. Placement of the polymer concrete shall not proceed until the Engineer verifies that the HMWM resin was properly promoted and initiated, as evidenced by the HMWM batch sample.

The polyester concrete shall be placed on the liquid or hardened HMWM prime coat within two hours of placing the prime coat. Polyester concrete shall be placed prior to gelling and within 15 minutes following initiation, whichever occurs first. Polyester concrete that is not placed within this time shall be discarded.

If, for any reason, polyester concrete is not placed over the prime coat within the two hour time limit, the Contractor shall apply a fresh coat of HMVM resin primer immediately followed by an abrasive sand finish coating. The abrasive sand finish shall be broadcast onto the surface to affect a uniform coverage of a minimum of 435 grams per square meter. Prior to applying the polyester concrete overlay, the surface shall be re-cleaned in accordance with Section 6-09.3(7).

Expansion joints shall be adequately isolated prior to placing the overlay as approved by the Engineer. Saw cutting at bridge expansion joints will not be allowed.

The surface temperature of the area receiving the polyester concrete shall be the same as specified above for the HMWM prime coat.

The polyester concrete shall be consolidated to a relative compaction of not less than 97 percent.